

# HITACHI

## ZX345USLC-7 | Preliminary ZAXIS-7 series

Reliable Solutions



# ZAXIS 345

## HYDRAULIC EXCAVATOR

Model code: ZX345USLC-7H

Engine rated power, net: 249 hp (186 kW)

Operating weight: 76,955–79,380 lb. (34,900–36,000 kg)

Bucket capacity: 1.30–2.11 yd<sup>3</sup> (1.00–1.62 m<sup>3</sup>)

# SPECIFICATIONS

ENGINE	
Model	Isuzu 6HK1X
Type	4-cycle water-cooled, common rail direct injection
Aspiration	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment	DOC + SCR system
No. of cylinders	6
Rated power	
ISO 14396: 2002 gross	264 hp (197 kW) at 1,900 min <sup>-1</sup>
ISO 9249: 2007 net	249 hp (186 kW) at 1,900 min <sup>-1</sup>
Maximum torque	774 lbf (1,050 Nm) at 1,500 min <sup>-1</sup>
Piston displacement	475.38 cu. in. (7.79 L)
Bore and stroke	4.5" x 4.9" (115 mm x 125 mm)
Batteries	2 x 12 V / 135 Ah

HYDRAULIC SYSTEM			
<b>Hydraulic Pumps</b>			
Main pumps	3 variable displacement axial piston pumps		
Maximum oil flow	2 x 62 gal/min (236 L/min) 1 x 55 gal/min (210 L/min)		
Pilot pump	1 gear pump		
Maximum oil flow	9.2 gal/min (34.7 L/min)		
<b>Hydraulic Motors</b>			
Travel	2 variable displacement axial piston motors		
Swing	1 axial piston motor		
<b>Relief Valve Settings</b>			
Implement circuit	4,974.8 psi (34.3 MPa)		
Swing circuit	4,699.2 psi (32.4 MPa)		
Travel circuit	4,974.8 psi (34.3 MPa)		
Pilot circuit	565.6 psi (3.9 MPa)		
Power boost	5,511.4 psi (38.0 MPa)		
<b>Hydraulic Cylinders</b>			
	Quantity	Bore	Rod diameter
Boom	2	5.3" (135 mm)	3.9" (100 mm)
Arm	1	5.9" (150 mm)	4.1" (105 mm)
Bucket	1	5.3" (135 mm)	3.5" (90 mm)

UPPERSTRUCTURE	
<b>Revolving Frame</b>	
D-section frame for resistance to deformation.	
<b>Swing Device</b>	
Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type.	
Swing speed	10.3 min <sup>-1</sup>
Swing torque	66,749 lbf (90.5 kNm)

UNDERCARRIAGE	
<b>Tracks</b>	
Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.	
<b>Numbers of Rollers and Shoes on Each Side</b>	
Upper rollers	2
Lower rollers	8
Track shoes	48
Track guards	3
<b>Travel Device</b>	
Each track driven by 2-speed axial piston motor. Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system: High-Low.	
Travel speeds	High: 0 to 2.5 mph (0 to 4.1 km/h) Low: 0 to 1.6 mph (0 to 2.6 km/h)
Maximum traction force	66,993 lbf (298 kN)
Gradeability	70% (35 degree) continuous

SERVICE REFILL CAPACITIES	
Fuel tank	100.3 gal (380.0 L)
Engine coolant	10.8 gal (41.0 L)
Engine oil	12.7 gal (48.0 L)
Swing device	3.1 gal (11.7 L)
Travel device (each side)	2.9 gal (11.0 L)
Hydraulic system	66.3 gal (251.0 L)
Hydraulic oil tank	42.2 gal (160.0 L)
DEF/AdBlue® tank	4.2 gal (16.0 L)

ENVIRONMENT	
Engine Emissions	EPA Final Tier 4 / EU Stage IV
<b>Sounds Level</b>	
Sound level in cab according to ISO 6396: 2008	LpA 69 dB(A)
External sound level according to ISO 6395: 2008 and EU Directive 2000/14/EC	LwA 104 dB(A)

## WEIGHTS AND GROUND PRESSURE

### Operating Weight and Ground Pressure

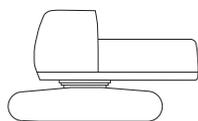
			ZX345USLC-7H <sup>*1</sup>	
Boom type			Monoblock	
Shoe type	Shoe width, inch (mm)	Arm length, ft-in (m)	lb (kg)	psi (kPa)
Triple grouser	32" (800)	12'4" (3.76)	79,366 (36,000)	7.40 (51.0)

\*1 Including 1.63 yd<sup>3</sup> (1.25 m<sup>3</sup>) (ISO 7451: 2007 heaped) bucket weight, 2,249 lb (1,020 kg) and counterweight, 19,136 lb (8,680 kg).

## BASIC MACHINE WEIGHT AND COMPONENTS WEIGHT

### Basic Machine Weight and Overall Width

Excluding front end attachment, fuel, hydraulic oil and coolant etc. Including counterweight.



		ZX345USLC-7H	
Shoe Type	Shoe width inch (mm)	Weight lb (kg)	Overall width in (mm)
Triple grouser	32" (800)	65,477 (29,700)	11' 1" (3,390)

### Components Weight

Unit: lb (kg)

		ZX300LC-7H
Counterweight		19,136 (8,680)
Monoblock boom (with arm cylinder and boom cylinder)		6,702 (3,040)
Arm 12' 4" (3.76 m) (with bucket cylinder)		3,549 (1,610)
Bucket ISO 7451: 2007 1.63 yd <sup>3</sup> (1.25 m <sup>3</sup> )		2,249 (1,020)

## BUCKET AND ARM DIGGING FORCE

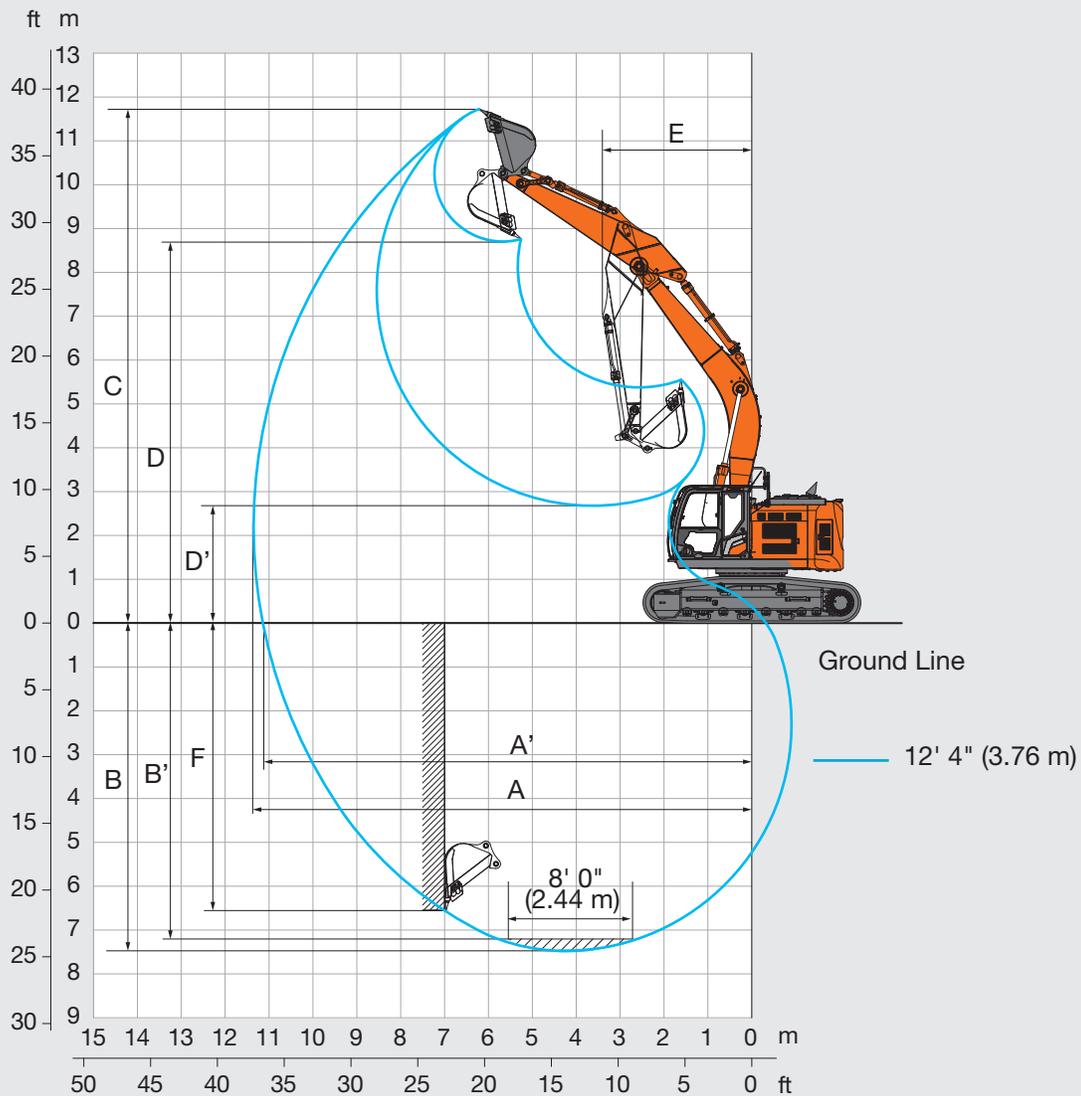
Unit: lbf (kN)

		ZX345USLC-7H
Arm length		12' 4" (3.76 m)
Bucket digging force* ISO 6015: 2006		45,411 (202)
Arm crowd force* ISO 6015: 2006		32,372 (144)

\* At power boost

# SPECIFICATIONS

## WORKING RANGES

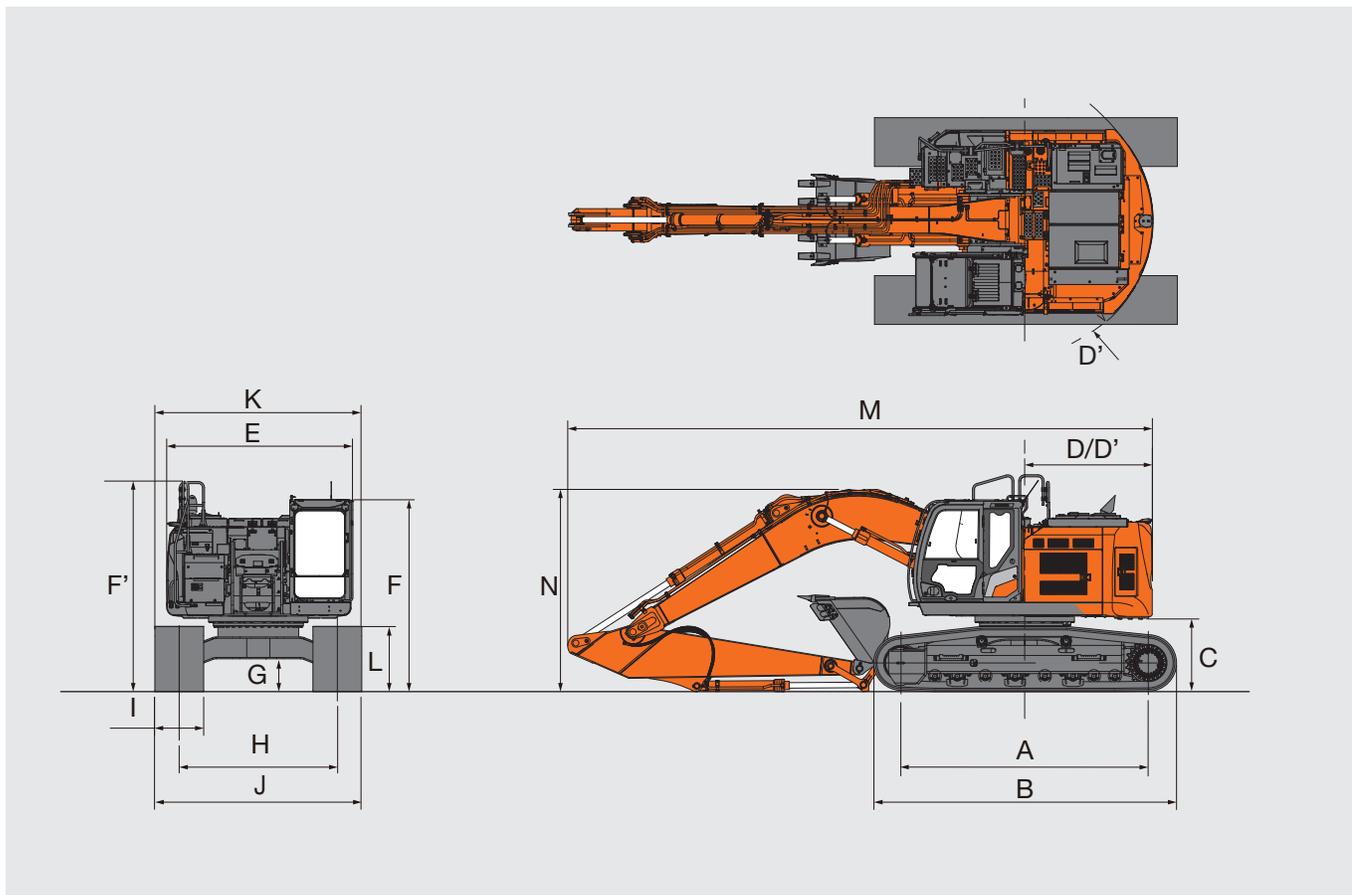


Unit: ft-in (mm)

	ZX345USLC-7H
	Monoblock boom
Arm length	12' 4" (3.76 m)
A Max. digging reach	37' 7" (11,460)
A' Max. digging reach (on ground)	36' 10" (11,220)
B Max. digging depth	24' 10" (7,570)
B' Max. digging depth for 8' 0" (2.44 m) level	24' 4" (7,410)
C Max. cutting height	38' 4" (11,690)
D Max. dumping height	28' 5" (8,670)
D' Min. dumping height	9' 1" (2,780)
E Min. swing radius	11' 1" (3,390)
F Max. vertical wall digging depth	22' 0" (6,710)

Excluding track shoe lug

**DIMENSIONS**



Unit: ft-in (mm)

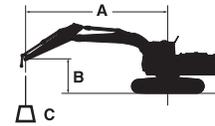
		ZX345USLC-7H
		Monoblock boom
A	Distance between tumblers	13' 3" (4,050)
B	Undercarriage length	16' 2" (4,940)
*C	Counterweight clearance	3' 10" (1,160)
D	Rear-end swing radius	6' 10" (2,090)
D'	Rear-end length	6' 10" (2,090)
E	Overall width of upperstructure	10' 0" (3,050)
F	Overall height of cab	10' 4" (3,150)
F'	Overall height of handrail	11' 8" (3,560)
*G	Min. ground clearance	1' 8" (510)
H	Track gauge	8' 6" (2,590)
I	Track shoe width	G 2' 7" (800)
J	Undercarriage width	11' 1" (3,390)
K	Overall width	11' 1" (3,390)
*L	Track height with triple grouser shoes	3' 6" (1,070)
M	Overall length with 12' 4" (3.76 m) arm	32' 10" (10,020)
N	Overall height of boom with 12' 4" (3.76 m) arm	11' 3" (3,420)

\* Excluding track shoe lug    G: Triple grouser shoe

# MACHINE CAPACITIES

## ZX345USLC-7H

- Notes:
1. Ratings are based on ISO 10567: 2007.
  2. Machine capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
  3. The load point is the center-line of the bucket pivot mounting pin on the arm.
  4. \*Indicates load limited by hydraulic capacity.
  5. 0 ft (0 m) = Ground.
  6. Each machine capacities values are applicable when selecting optional attachment basic piping and hose rupture valve for boom and arm.



- A: Load radius  
 B: Load point height  
 C: Machine capacity

For machine capacities, subtract installed attachment and quick hitch weight from machine capacities.  
 To determine lifting capacities, apply "Rating over-side or 360 degrees" machine capacities from the table and deduct weight of installed attachment and quick hitch.  
 Optional feature may affect machine performance.

### ZX345USLC-7H MONOBLOCK BOOM

Rating over-front Rating over-side or 360 degrees Unit: lb (kg)

Conditions	Load point height ft (m)	Load radius												At max. reach		
		5 ft (1.5 m)		10 ft (3.0 m)		15 ft (4.5 m)		20 ft (6.0 m)		25 ft (7.5 m)		30 ft (9.0 m)				ft-in (meter)
Boom 20' 4" (6.20 m)	25' (7.5)									12,080* (5,740)*	12,080* (5,740)*			8,530* (3,850)*	8,530* (3,850)*	27' 5" (8.36)
	20' (6.0)							15,380* (7,040)*	15,380* (7,040)*	14,530* (6,730)*	13,650 (6,340)	(4,390)*	(4,390)*	8,280* (3,750)*	8,280* (3,750)*	30' 1" (9.16)
	15' (4.5)					22,730* (10,860)*	22,730* (10,860)*	19,850* (9,160)*	18,660 (8,650)	17,490* (8,070)*	13,240 (6,140)	12,320* (6,010)*	9,890 (4,600)	8,340* (3,780)*	8,340* (3,780)*	31' 8" (9.65)
	10' (3.0)					31,350* (14,580)*	26,930 (12,470)	23,340* (10,790)*	17,640 (8,170)	19,380* (8,920)*	12,710 (5,890)	15,060* (7,270)*	9,630 (4,470)	8,680* (3,940)*	8,520 (3,850)	32' 5" (9.88)
Arm 12' 4" (3.76 m)	5' (1.5)					37,060* (17,170)*	25,070 (11,620)	26,420* (12,210)*	16,700 (7,730)	20,480 (9,500)	12,200 (5,650)	15,620 (7,250)	9,360 (4,340)	9,320* (4,230)*	8,350 (3,780)	32' 5" (9.87)
	0 (Ground)			14,470* (6,380)*	14,470* (6,380)*	39,280* (17,240)*	24,110 (11,190)	(13,030)*	16,050 (7,440)	20,040 (9,300)	11,800 (5,470)	15,400 (7,140)	9,160 (4,240)	10,410* (4,720)*	8,530 (3,870)	31' 7" (9.62)
	-5' (-1.5)	15,830* (7,100)*	15,830* (7,100)*	22,770* (10,080)*	22,770* (10,080)*	38,550* (17,780)*	23,810 (11,060)	27,670 (12,860)	15,740 (7,290)	19,810 (9,190)	11,600 (5,370)	(6,530)*	(4,210)	12,240* (5,530)*	9,160 (4,150)	29' 11" (9.11)
	-10' (-3.0)	24,400* (10,900)*	24,400* (10,900)*	33,570* (14,830)*	33,570* (14,830)*	35,300* (16,310)*	23,930 (11,110)	26,430* (12,230)*	15,740 (7,290)	19,850 (9,200)	11,630 (5,380)			15,670* (7,040)*	10,510 (4,740)	27' 2" (8.29)
Counterweight 19,136 lb (8,680 kg)	-15' (-4.5)			39,500* (18,400)*	39,500* (18,400)*	28,900* (13,470)*	24,440 (11,340)	21,490* (10,090)*	16,090 (7,440)					17,410* (7,910)*	13,490 (6,020)	23' 1" (7.04)



# EQUIPMENT

●: Standard equipment ○: Optional equipment -: Not applicable

ENGINE	ZX345USLC-7H
Aftertreatment device	●
Air cleaner double filters	●
Alternator 50 A	●
Auto idle system	●
Auto shut-down control	●
Cartridge-type engine oil filter	●
Cartridge-type fuel main filter	●
Cold fuel resistance valve	●
ConSite OIL (sensor)*	●
DEF / AdBlue® tank	●
DEF / AdBlue® tank inlet strainer and extension filler	●
Dry-type air filter with evacuator valve (with air filter restriction indicator)	●
Dust-proof indoor net	●
ECO / PWR / HP mode control	●
Electrical fuel feed pump	●
Engine oil drain coupler	●
Expansion tank	●
Fan guard	●
Fuel cooler	●
Fuel pre-filter with water separator	●
Isolation-mounted engine	●
Maintenance free pre-cleaner	○
Radiator, oil cooler and intercooler	●

HYDRAULIC SYSTEM	ZX345USLC-7H
Auto power lift	●
ConSite OIL (sensor)*	●
Control valve with main relief valve	●
High mesh full flow filter	●
Hose rupture valve for boom/arm and overload alarm	○
Pilot filter	●
Power boost	●
Restriction indicator for full flow filter	○
Suction filter	●
Swing dampener valve	●
Two extra ports for control valve	●
Variable relief valve for breaker and crusher	●
Work mode selector	●

CAB	ZX345USLC-7H
4 fluid-filled elastic mounts	●
8 inch monitor	●
All-weather sound suppressed steel cab	●
Auto control air conditioner	●
AUX function lever (breaker)	●
AUX function lever (breaker assist)	○
Bluetooth® integrated radio	●
Console height adjustment	●
Control lever auto-lock	●
CRES VII (center pillar reinforced structure) cab	●
Drink holder with hot and cool function	●
Electric double horn	●
Engine shut-off switch	●
Equipped with reinforced, tinted (green color) glass windows	●
Evacuation hammer	●
Floor mat	●
Footrest	●
Front window washer (2 points)	●
Glove compartment	●
Hands-free calling device	●
Hot and cool box	●
Intermittent windshield wipers	●
Key cylinder light	●
LED room light	●
Magazine rack	●
OPG front guard Level II (ISO 10262: 1998) compliant	○
OPG top guard Level I (ISO 10262: 1998) compliant	●
OPG top guard Level II (ISO 10262: 1998) compliant	○
Pilot shut-off lever	●
Power outlet 12 V and 24 V	●
Push button low idle	●
Rain guard (without OPG front guard)	●
Rear tray	●
Retractable seat belt 3 in. (76 mm)	●
ROPS (ISO 12117-2: 2008) compliant cab	●
Rubber radio antenna	●
Seat: air suspension seat with heater	●
Seat adjustment part: backrest, armrest, height and angle, slide forward/back	●
Seat belt reminder	●
Short wrist control levers	●
Smartphone holder	●
Straight travel pedal	○
Sunscreen roller type (multi-use front or side and rear window)	●
Transparent roof with slide curtain	●
USB power supply	●
Wide view wiper	●
Windows on front, upper, lower and left side can be opened	●
2 speakers	●

●: Standard equipment ○: Optional equipment -: Not applicable

MONITOR SYSTEM	ZX345USLC-7H
Alarm buzzers: overheat, engine oil pressure, overload, SCR system trouble, etc	●
Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, SCR system trouble, etc	●
Display of meters: water temperature, hour, fuel rate, clock, DEF / AdBlue® rate, etc	●
Other displays: work mode, auto-idle, glow, rear view monitor, side view monitor, operating conditions, etc	●
35 languages selection	●

LIGHTS	ZX345USLC-7H
Additional boom LED light with cover	●
Additional cab roof front LED lights	●
LED lights for camera (side and rear view camera)	●
Rotating lamp	○
2 working LED lights	●

UPPER STRUCTURE	ZX345USLC-7H
AERIAL ANGLE (270-degree view camera system)	●
Batteries 2 x 128 Ah	●
Body top handrail	●
Control pattern changer (ISO / BH)	●
Counterweight 19,136 lb (8,680 kg)	●
Fuel level float	●
HD Undercover	○
Hydraulic oil level gauge	●
Lockable fuel refilling cap	●
Lockable machine covers	●
Lockable tool box	●
Platform handrail	●
Side view mirror (right and left)	●
Skid-resistant plates	●
Swing parking brake	●
Undercover	●
Utility space	●
2 way battery disconnect switch	●

MISCELLANEOUS	ZX345USLC-7H
ConSite	○
Global e-Service	●
Onboard information controller	●
Satellite communication device	○
Standard tool kit	●
Travel alarm	●

UNDERCARRIAGE	ZX345USLC-7H
Bolt-on sprocket	●
Greasing type track adjuster	●
Reinforced track links with pin seals	●
Shoe: 32" (800 mm) triple grouser	●
Towing hole for light weight object	●
Track undercover	○
Travel direction mark on track frame	●
Travel motor covers	●
Travel parking brake	●
Upper and lower rollers	●
3 track guards (each side)	●
4 tie down brackets	●

FRONT ATTACHMENTS	ZX345USLC-7H
Arm 12' 4" (3.76 m)	●
Arm tip remote lubrication	●
Casted bucket link A	●
Centralized lubrication system	●
Dirt seal on all bucket pins	●
Flanged pin	●
HN bushing	●
Lower arm reinforcement	●
Reinforced resin thrust plate	●
WC (tungsten-carbide) thermal spraying	●

ATTACHMENTS	ZX345USLC-7H
Accessories for 2 speed selector	○
Assist piping	○
Auxiliary hydraulic piping	●
Auxiliary hydraulic piping (straight-short piping)	○
Pilot accumulator	○

Standard and optional equipment may vary by country, so please consult your Hitachi Construction Machinery Americas authorized dealer for details.

\* Engine oil and hydraulic oil monitoring sensor.



# HITACHI

## Reliable Solutions



REPUTATIONS ARE  
**BUILT ON IT.**

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Through our long-term commitment to maintaining a leadership position in technology, service, and support, we support an extensive network of independent, local dealers focused on providing you with knowledgeable and experienced sales, service, and parts personnel — all backed by our dedicated support teams.

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